Serial No.: 09/965,514   Attorney's Docket No.: 10559-526001/P12446

REMARKS

Claims 1-2 and 4-29 are pending, with claims 1, 8, 13, 18 and 23 being independent. Reconsideration and allowance of the above-referenced application are respectfully requested.

Claims 8, 9, 11, 13, 15, 18 and 19 stand rejected under 35 U.S.C. 102(e) as allegedly being anticipated by Sawada et al. (US Patent 2002/0016858). Claims 1-7, 10, 12, 14, 16, 17 and 20-29 stand rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Sawada et al. These contentions are respectfully traversed.

Sawada is directed to a packet communications apparatus that allows a network administrator to restrict access to particular source addresses for the purposes of security. In contrast with the source-based filtering solution for security of Sawanda, the present application is directed to filtering of packets with predetermined non-forwarding destination addresses. The independent claims clearly state that a routing data structure is used to effect destination address filtering, where packets are dropped if they contain a predetermined non-forwarding destination address. Such non-forwarding addresses are destination addresses that are invalid for packets traveling between networks (e.g., deprecated broadcast addresses).

Independent claim 1 recites, "a network interface

2

configurable to receive data packets; a processor coupled with

the network interface; and a memory coupled with the processor,

the memory being configured to instruct the processor to load a

routing data structure configured to store information

indicating a received data packet is to be dropped if the

received data packet includes a predetermined non-forwarding

destination address." (Emphasis added.)

Independent claim 8 recites, "storing information in a

routing data structure, wherein the information indicates that a

packet having a predetermined non-forwarding destination address

is to be dropped." (Emphasis added.)

Independent claim 13 recites, "comparing a destination

address of a packet with routing information stored in a routing

data structure, the routing information indicating that the

packet either is to be routed or dropped; and selectively

routing the packet based on the routing information stored in

the routing data structure, said selectively routing including

dropping the packet if the destination address comprises a

predetermined non-forwarding address." (Emphasis added.)

Independent claim 18 recites, "memory means for storing a

data structure comprising a destination address routing table

having entries, wherein at least one entry contains an

indication that a packet having a predetermined non-forwarding

destination address that resolves to the least one entry is to

3

be dropped; and processing means for receiving a packet having a destination address from a first network, for checking the destination address against the destination address routing table, and for transmitting the received packet to a second network only if the received packet does not resolve to the at least one entry." (Emphasis added.)

Independent claim 23 recites, "loading one or more routing tables with destination addresses and information selectively indicating either a next-hop address for a packet or that the packet is to be dropped, wherein at least one of the destination addresses comprises a predetermined non-forwarding address for which the information indicates the packet is to be dropped." (Emphasis added.)

The claimed subject matter allows incorporation of address error checks into a forwarding table, which is a non-obvious usage of a forwarding table that Sawada neither teaches nor suggests. Sawada does not drop packets based on a predetermined non-forwarding destination address, but rather forwards packets based on a registered destination address and a check for a specific source address. (See Sawada at ¶s 21 and 116, and Fig. 12.)

In response to the previously presented arguments along these lines, the examiner cites paragraph 123 of Sawada and asserts, "Sawada clearly teaches that a destination address in

4

Serial No.: 09/965,514   Attorney's Docket No.: 10559-526001/P12446

the destination address field in 1201 (e.g., 192.168.2.2)
combined with the Discard Flag in 1203 must be a predefined non-
forwarding destination address, because the packet having the
destination address matching the entry is non-forwarded." (See
the 2-7-2006 final Office Action at page 8.) However, what
Sawada actually states is as follows:

> To access the file serer 1322, the user terminal
> 1333 that is not yet user-authenticated sends a packet
> 1401 addressed to the file server, that is, with its
> destination address being the IP address (192.168.2.2)
> of the file server 1322. In this case, the packet 1401
> is transferred via the PHYS. IF-C 1004 of the router
> 1000 to the filtering unit C 1014. In the filtering
> table 1101 of the filtering unit C 1014, as
> illustrated in FIG. 12, entry #2 exists, on the line
> of which the content of the destination address
> condition field 1201 matches the destination address
> included in the packet 1401. The filtering unit C 1014
> refers to entry #2 in the filtering table 1101 and
> looks up the contents of the associated source address
> condition field 1202 and forward/discard flag field
> 1203. The content of the forward/discard flag field
> 1203 on the entry #2 line in the filtering table 1101
> indicates "discard." Thus, the filtering unit C 1014
> discards the packet 1401, according to the contents of
> the filtering table 1101. In consequence, the packet
> 1401 sent from the unauthenticated user terminal 1333
> does not arrive at the file server 1322.

(See Sawada at paragraph 123; emphasis added.)

5

Sawada looks at both the source address and destination address when making a forwarding determination. Moreover, if the user terminal trying to access the file server 1322 (which has IP address 192.168.2.2 in Sawada's example) is in fact authorized, then the packet is forwarded. Thus, the destination address 192.168.2.2 may be both routed and dropped (in accordance with the filtering table 1101) depending on the source addresses in the packets in which the given destination address appears. Therefore, this destination address cannot be considered a pre-determined non-forwarding destination address.

For all of these reasons, independent claims 1, 8, 13, 18 and 23 are in condition for allowance. Dependent claims 2, 4-7, 9-12, 14-17, 19-22 and 24-29 are patentable based on the above arguments and the additional recitations they contain. For example, claims 7, 12, 16, 22, 28 and 29 are patentable because Sawada fails to teach or suggest filtering one or more deprecated directed broadcast addresses as claimed. The Official Action acknowledges that Sawada does not teach a filtering table including a deprecated directed broadcast address, but then suggests that such would be obvious, without any evidence.

Thus, a prima facie case of obviousness has not been established. The arguments presented in the last response regarding claims 7, 12, 16, 22, 28 and 29 are not addressed in the final Office Action. Since the final Office Action

6

Serial No.: 09/965,514   Attorney's Docket No.: 10559·S26001/P12446

acknowledges that Sawada fails to disclose an element of the claims, and provides <u>no evidence</u> of motivation to add that element to Sawada or how such element could be added to Sawada, the rejection of claims 7, 12, 16, 22, 28 and 29 is clearly suffering from both legal and factual deficiencies and should be withdrawn.

It is believed that all of the pending claims have been addressed. However, the absence of a reply to a specific issue or comment does not signify agreement with or concession of that issue or comment. Because the arguments made above may not be exhaustive, there may be reasons for patentability of any or all pending claims (or other claims) that have not been expressed. Finally, nothing in this paper should be construed as an intent to concede any issue with regard to any claim, except as specifically stated in this paper.

It is respectfully suggested for all of these reasons, that the current rejections are overcome, that none of the cited art teaches or suggests the features which are claimed, and therefore that all of these claims should be in condition for allowance.

A formal notice of allowance is thus respectfully requested.

7

Serial No.: 09/965,514   Attorney's Docket No.: 10559-526001/P12446

No fees are believed due with this response. Please apply

any necessary charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date: April 7, 2006   _____

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8